

What is claimed is:

1. A method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface, the schedule having at least one schedule parameter, comprising the steps of:

selecting two or more days of the week to modify the schedule;

changing the at least one schedule parameter for one or more periods during the selected days; and

saving the changes to the at least one schedule parameter for the selected days.

2. The method of claim 1, wherein the step of selecting two or more days of the week to modify the schedule occurs prior to the step of changing the at least one schedule parameter for one or more periods during the selected days.

3. The method of claim 1, wherein the step of selecting two or more days of the week to modify the schedule occurs after the step of changing the at least one schedule parameter for one or more periods during the selected days.

4. The method of claim 1, further comprising the step of initiating a schedule review mode within the controller and displaying the current schedule parameters.

5. The method of claim 1, further comprising the steps of:
initializing a scheduling routine within the controller for modifying at least one schedule parameter within the schedule; and

initiating an editing mode within the controller.

6. The method of claim 1, wherein said one or more periods include a wake period, a leave period, a return period, and a sleep period.

7. The method of claim 1, further comprising the step of canceling one or more periods in the schedule.

8. The method of claim 1, wherein said at least one schedule parameter is selected from the group consisting of an event time parameter, a heat set point parameter, a cool set point parameter, a fan mode parameter, and a humidity level parameter.

9. The method of claim 1, further comprising the step of providing an indication that the modified schedule parameters have been saved.

10. The method of claim 1, wherein the user interface comprises a touch screen.

11. The method of claim 1, wherein the user interface comprises a display panel and keypad.

12. The method of claim 1, wherein the user interface is a menu-driven interface.

13. The method of claim 1, wherein said schedule is a heating schedule.
14. The method of claim 1, wherein said schedule is a cooling schedule.
15. The method of claim 1, wherein said schedule is a venting schedule.
16. The method of claim 1, wherein said schedule is a fan schedule.
17. The method of claim 1, wherein said controller is an HVAC controller.
18. A method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a menu-driven user interface, the schedule having at least one schedule parameter, comprising the steps of:
 - initiating an editing mode within the controller;
 - selecting two or more days of the week to modify the schedule;
 - changing the at least one schedule parameter for one or more periods during the selected days; and
 - exiting the editing mode.

19. The method of claim 18, wherein the step of selecting two or more days of the week to modify the schedule occurs prior to the step of changing the at least one schedule parameter for one or more periods during the selected days.

20. The method of claim 18, wherein the step of selecting two or more days of the week to modify the schedule occurs after the step of changing the at least one schedule parameter for one or more periods during the selected days.

21. The method of claim 18, further comprising the step of initiating a schedule review mode within the controller and displaying the current schedule parameters.

22. The method of claim 21, wherein the step of initiating the schedule review mode and displaying the current schedule parameters occurs prior to the step of initiating an editing mode within the controller.

23. The method of claim 18, wherein said one or more periods include a wake period, a leave period, a return period, and a sleep period.

24. The method of claim 18, further comprising the step of canceling one or more periods in the schedule.

25. The method of claim 18, wherein said at least one schedule parameter is selected from the group consisting of an event time parameter, a heat set point parameter, a cool set point parameter, a fan mode parameter, a ventilation parameter, and a humidity level parameter.

26. The method of claim 18, wherein said step of exiting the editing mode comprises the steps of:

sending a signal to the controller to save the changed schedule parameters; and
providing an indication that the modified schedule parameters have been saved.

27. The method of claim 18, wherein the user interface comprises a touch screen.

28. The method of claim 18, wherein the user interface comprises a display panel and keypad.

29. The method of claim 18, wherein said schedule is a heating schedule.

30. The method of claim 18, wherein said schedule is a cooling schedule.

31. The method of claim 18, wherein said schedule is a venting schedule.

32. The method of claim 18, wherein said schedule is a fan schedule.

•

• 33. The method of claim 18, wherein said controller is an HVAC controller.

34. A programmable controller for use in controlling at least one system of a home, building and/or related grounds, the controller comprising:

a user interface;

a memory unit for storing a set of schedule parameters; and

a processor configured to run a scheduling routine, said scheduling routine including an editing mode for programming a schedule in the memory unit;

wherein the editing mode allows the user to concurrently select two or more days of the week to modify the schedule, and then edit the schedule parameters for the selected days via the user interface.

35. The controller of claim 34, wherein the editing mode allows the user to select said two or more days using a single screen on the user interface

36. The controller of claim 34, wherein said system is an HVAC system.

37. The controller of claim 34, wherein said system is a security system.

38. The controller of claim 34, wherein said system is a lighting system.

39. The controller of claim 34, wherein said system is a sprinkler or drip water system.

40. The controller of claim 34, wherein said system is an A/V system.

41. The controller of claim 34, wherein the user interface comprises a touch screen.

42. The controller of claim 34, wherein the user interface comprises a display panel and keypad.

43. The controller of claim 34, wherein the user interface is a menu-driven interface.

44. The controller of claim 34, wherein the scheduling routine further includes a schedule review mode for displaying the current set of schedule parameters stored in the memory unit.

45. The controller of claim 44, wherein the schedule review mode is separate from the editing mode.

46. The controller of claim 34, wherein the schedule includes one or more periods.

47. The controller of claim 46, wherein said one or more periods include a wake period, a leave period, a return period, and a sleep period.

48. The controller of claim 46, further comprising means for canceling one or more periods during the schedule.

49. A programmable controller for use in controlling at least one system of a home, building and/or related grounds, the controller comprising:

a user interface;

a memory unit for storing a set of schedule parameters; and

a processor configured to run a scheduling routine, said scheduling routine including an editing mode for programming a schedule in the memory unit;

wherein the editing mode allows the user to concurrently select one or more periods of the schedule for two or more selected days of the week, and then edit the schedule parameters for the selected periods and days via the user interface.

50. A method for changing two or more set point values of a schedule of a programmable controller, wherein the schedule includes two or more current set point values, the method comprising:

identifying a current set point value;

providing a new set point value; and

· updating two or more current set point values in the schedule with the new set point value.

51. A method according to claim 50 wherein the updating step replaces all of the current set point values in the schedule with the new set point value.

52. A method according to claim 50 wherein the schedule includes a number of days with each day having one or more current set point values, the method further comprising:

identifying one or more of the days of the schedule; and

updating two or more current set point values for the identified days of the schedule with the new set point value.

53. A method according to claim 50 wherein the schedule includes a number of days with each day having a number of periods, and wherein with each period has one or more current set point value, the method further comprising:

identifying one or more of the periods of the schedule; and

updating two or more current set point values in the identified period(s) of the schedule across two or more days of the schedule with the new set point value.

54. A method according to claim 50 wherein the new set point value is provides as an offset value.

55. A schedule for a programmable controller, the schedule comprising:
a number of time slots, each time slot having a corresponding tag assigned thereto, with two or more time slots assigned to the same tag, wherein each tag corresponds to a programmable set point value.

56. A method for programming a schedule of a programmable controller, wherein the schedule includes a number of time slots, the method comprising:
identifying a number of tag values;
assigning a tag value to at least selected time slots of the schedule, at least two time slots having the same tag value; and
assigning each of the tag values to a set point value.

57. A method according to claim 56 wherein when a controller operates in accordance with the schedule, the controller reading up the tag value for a current time slot, determines the set point value assigned to the tag value, and setting the current set point to the set point value.

58. A method for changing two or more set point values of a schedule of a programmable controller, wherein the schedule includes two or more days with each of the two or more days having two or more periods, each period having a current set point value, the method comprising:

selecting a period;
providing a new set point value;

updating at least two of the current set point values for the selected period for two or more days with the new set point value.

59. A method for displaying a schedule of a programmable controller for a home, building and/or related grounds, the method comprising:

displaying a first portion of the schedule on a display; and

panning or scrolling across the schedule to display a second portion of the schedule on the display.

60. A method according to claim 59 wherein the programmable controller includes an input means, said input means allowing a user to provide input commands to the programmable controller to control the panning or scrolling across the schedule.

61. A method according to claim 60 wherein the input means comprises at least one button.

62. A method according to claim 61 wherein the at least one button includes a soft button.

63. A method for displaying a schedule of a programmable controller for a home, building and/or related grounds, the method comprising:

providing a schedule having a number of day periods with each day period having a number of schedule periods, and each schedule period having one or more schedule

parameters, wherein at least some of the one or more schedule parameters for at least two of the day periods can be independently programmed; and

simultaneously displaying at least some of the schedule parameters for the at least two day periods on a display.

64. A method according to claim 63, wherein the simultaneously displaying step simultaneously displays at least some of the schedule parameters for five or more day periods on the display.

65. A method according to claim 63, wherein the simultaneously displaying step simultaneously displays at least some of the schedule parameters for seven or more day periods on the display.

66. A method according to claim 63, wherein the simultaneously displaying step simultaneously displays a majority of the schedule parameters for the at least two day periods on the display.

67. A method according to claim 63, wherein the simultaneously displaying step simultaneously displays all of the schedule parameters for the at least two day periods on the display.

68. A method for displaying a schedule of a programmable controller for a home, building and/or related grounds, the schedule having a number of day periods with

each day period having a number of schedule periods, and each schedule period having one or more schedule parameters, the method comprising:

displaying less than all of the schedule parameters for at least some of the schedule periods on a display; and

selecting a schedule period;

displaying at least some other schedule parameter for the selected schedule period on the display.

69. A method according to claim 68 wherein the at least some other schedule parameter is displayed in a pop-up window on the display.

70. A method according to claim 69 wherein the pop-up window displays all of the schedule parameters for the selected schedule period.

71. A method according to claim 69 further including the step of editing one or more of the schedule parameters displayed in the pop-up window.

72. A method according to claim 68 wherein the less than all of the schedule parameters includes a set point.

73. A method for displaying a schedule of a programmable controller for a home, building and/or related grounds, the schedule having a number of day periods with

- each day period having a number of schedule periods, and each schedule period having one or more schedule parameters, the method comprising:

displaying a line graph versus time for each of at least selected day periods, wherein the line graph shows a comfort temperature or an economy temperature, as well as the start time, for at least selected schedule periods.

74. A method according to claim 73 further comprising the step of displaying one or more schedule parameters adjacent to the line graph.

75. A method according to claim 74 wherein at least some of the one or more schedule parameters are displayed adjacent to the line graph near a corresponding schedule period.

76. A method according to claim 73 wherein the line graph shows a comfort temperature or an economy temperature by the height of the line graph.

77. A method for displaying a schedule of a programmable controller for a home, building and/or related grounds, the schedule having a number of day periods with each day period having a number of schedule periods, and each schedule period having one or more schedule parameters, the method comprising:

displaying a line graph versus time for each of at least selected day periods, wherein the line graph includes line segments that correspond to at least selected schedule periods;

at least selected line segments being displayed with a visually discernable indicator that provides an indication of the value of at least one schedule parameter of the corresponding schedule period.

78. A method according to claim 77 wherein visually discernable indicator is color.

79. A method according to claim 77 wherein visually discernable indicator is line width.

80. A method according to claim 77 wherein visually discernable indicator is a pattern.

81. A method according to claim 73 further comprising the step of displaying one or more schedule parameters adjacent to the line graph.